Claim Amendments

1. (Currently Amended) A method, comprising

determining a value for each feature in a group of features provided by a

training data;

eliminating at least one feature from the group ~~by utilizing~~ based upon the value

for each feature in the group;

updating the value for each feature in the group based on a part of the training

data that corresponds to the eliminated feature;

repeating of eliminating the at least one feature from the group and updating

the value for each feature of the group until a number of features in the group reaches

a predetermined value to generate a feature ranking list; and

recognizing a new data corresponding to the group of features with the feature

ranking list.

2. The method of claim 1, wherein the training data further comprises a plurality

of training samples, each of the training samples corresponding to the group of

features.

3. The method of claim 1, wherein determining the value comprises:

computing a kernel data based on the training data;

computing the value for each feature of the group based on the kernel data; and

storing the kernel data in a buffer.

4. The method of claim 3, wherein computing the kernel data further comprises computing a matrix as the kernel data, each component of the matrix comprising a dot product of two of training samples provided by the training data.

5. The method of claims 1, wherein updating the value further comprises:

retrieving a kernel data from a buffer;

updating the kernel data based on the part of the training data that corresponds to the eliminated features; and

updating the value for each feature of the group based on the updated kernel data.

6. The method of claim 5, wherein updating the kernel data further comprises:

subtracting a matrix from the kernel data, each component of the matrix comprising a dot product of two of training samples provided by the part of the training data.

7. The method of claim 1, wherein eliminating at least one feature comprises:

computing a ranking criterion for each feature of the group based on the value

for the each feature;

eliminating the at least one feature with the minimum ranking criterion from the

group; and

recording the eliminated feature in a feature ranking list.

8. (Canceled).

9. (Currently Amended) An apparatus, comprising:

a training logic to determine a value for each feature in a group of features

provided by a training data; and

an eliminate logic to eliminate at least one feature from the group by utilizing

based upon the value for each feature in the group,

wherein the training logic further updates the value for each feature in the group

based on a part of the training data that corresponds to the eliminated feature, and the

apparatus further repeats eliminating the at least one feature from the group and

updating the value for each feature of the group until a number of features in the group

reaches a predetermined value, to generate a feature ranking list for a use of

recognizing a new data corresponding to the group of features.

10. The apparatus of claim 9, wherein the training data comprises a plurality of training samples, each of the training samples having the group of features.

~~12~~ 11. (Currently Amended) The apparatus of claim 9, further comprising:

a decision logic to decide whether to repeat the elimination of the at least one features from the group and update of the value for each feature of the group until a number of features in the group reaches a predetermined value.

~~13~~ 12. (Currently Amended) The apparatus of claim 9, wherein the training logic further comprises:

a buffer to store a kernel data;

a kernel data logic to update the kernel data in the buffer based on the part of the training data that corresponds to the eliminated features;

a value update logic to update the value based on the kernel data.

~~14~~ 13. (Currently Amended) The apparatus of claim ~~13~~ 12, wherein the kernel data logic subtracts a matrix from the kernel data, each component of the matrix comprising a dot product of two of training samples provided by the part of the training data.

15 14. (Currently Amended) The apparatus of claim 9, wherein the eliminate

logic further comprises a ranking criterion logic to compute a ranking criterion for each

feature of the group based on the value for the each feature.

16 15. (Currently Amended) The apparatus of claim 9, wherein the eliminate

logic further comprises a feature eliminate logic to eliminate the at least one feature

having the minimum ranking criterion from the group.

17 16. (Currently Amended) A machine-readable medium comprising a plurality

of instructions, that in response to being executed, result in a computing system:

determining a value for each feature in a group of features provided by a

training data;

eliminating at least one feature from the group by utilizing based upon the

value for each feature in the group; and

updating the value for each feature in the group based on a part of the training

data that corresponds to the eliminated feature;

repeating of eliminating the at least one feature from the group and updating

the value for each feature of the group until a number of features in the group reaches

a predetermined value to generate a feature ranking list; and

recognizing a new data corresponding to the group of features with the feature

ranking list.

~~18~~ 17. (Currently Amended) The machine-readable medium of claim ~~17~~ 16,

wherein the training data further comprises a plurality of training samples, each of the

training samples corresponding to the group of features.

~~19~~ 18. (Currently Amended) The machine-readable of claim ~~17~~ 16, wherein the

plurality of instructions that result in the computing system determining the value,

further result in the computing system:

computing a kernel data based on the training data;

computing the value for each feature of the group based on the kernel data; and

storing the kernel data in a buffer.

~~20~~ 19. (Currently Amended) The machine-readable of claim ~~19~~ 18, wherein the

plurality of instructions that result in the computing system computing the kernel data,

further result in the computing system computing a matrix as the kernel data, each

component of the matrix comprising a dot product of two of training samples provided

by the training data.

~~21~~ 20. (Currently Amended) The machine-readable of claim ~~17~~ 16, wherein the

plurality of instructions that result in the computing system updating the value, further

result in the computing system:

retrieving a kernel data from a buffer;

updating the kernel data based on the part of the training data that corresponds

to the eliminated feature; and

updating the value for each feature of the group based on the updated kernel

data.

22 21. (Currently Amended). The machine-readable of claim 21 20, wherein the

plurality of instructions that result in the computing system updating the kernel data,

further result in the computing system:

subtracting a matrix from the kernel data, each component of the matrix

comprising a dot product of two of training samples provided by the part of the training

data that corresponds to the eliminated feature.

23 22. (Currently Amended) The machine-readable of claim 17 16, wherein the

plurality of instructions that result in the computing system eliminating at least one

feature, further result in the computing system:

computing a ranking criterion for each feature of the group based on the value

for the each feature;

eliminating the at least feature with the minimum ranking criterion from the

group; and

recording the eliminated feature in a feature ranking list.

24. (Canceled).